

City of Hampton- Department of Public Works

Proposed Indian River Creek Drainage Maintenance Project

Some Questions and Answers about the Project

As of May 1, 2012

1. What is the project purpose and scope?

This project has been proposed in order to restore the storm water and tidal outflow along Indian River Creek, and from the neighborhoods around the creek, by removing a large quantity of the accumulated silt in the waterway and reestablishing a shallow channel along the creek, from just south of Kecoughtan Road to just south of Chesapeake Avenue. The project scope will also include the removal of silt between the restored channel and various storm drain outfall pipes that carry storm water from the surrounding neighborhoods into the waterway. Also, a storm gate is proposed on the south side of Kecoughtan Road to prevent higher-than-normal tides from backing up into the drainage channel north of Kecoughtan Road. **The project is not intended to be a typical dredging project which would be done to provide a waterway suitable for sail and/or power boating, because the regulatory agencies would not allow such a project to be permitted,**(although it could enhance recreational opportunities for shallow draft boats such as canoes, kayaks, and john boats).

2. Why has this project been initiated?

The project concept was initiated in 2009 in response to flooding complaints by citizens who suffered property damage during Isabel, Floyd, Ernesto and other severe storm events. The most severe flooding impacts were north of Kecoughtan Road, in the drainage way east of Pochin Place, where the ground is lower than 6 feet above sea level. Also, the residents living along the creek, south of Kecoughtan Road, have expressed concern about the poor flow of storm water from their streets and yards into the creek, and about foul odors, due to the buildup of silt in the creek.

3. Exactly what is being considered?

A 2007 engineering study found that the drainage culverts under Kecoughtan Road are filled with sediment, and there is no clear outfall downstream through Indian River Creek because the creek is filled with sediment. Even if the culverts under Kecoughtan and all of the drainage outfalls into the creek were cleaned out, there is no path for the drainage to flow downstream out to the Hampton Roads waterway. The flooding north of Kecoughtan Road, and the street and yard flooding south of Kecoughtan Road, can be mitigated by clearing a downstream flow path (i.e. by reestablishing a drainage channel through Indian River Creek), and constructing a storm gate at Kecoughtan Road to prevent storm surges from backing up north of Kecoughtan Road. The channel would be 20 feet wide in the bottom, and have side slopes extending up from the bottom at 3 horizontal to 1 vertical. The channel would be excavated down to approximately elevation minus 3 feet on the NAVD88 vertical datum. Depending upon the depth of the sediment at any particular location, the channel

could be approximately 40 feet wide at the top of the excavation. The channel will be tapered to fit within the existing site constraints.

4. What is different about the project as proposed today compared to the project presented to the public in 2010?

In 2010, the City was asking property owners who abutted the creek to support the project by agreeing to give permanent easements across a portion of their property along the path of the proposed channel in the creek. A large number of residents, while they may have supported the project, did not wish to convey a permanent easement, which some considered a transfer of their property rights without just compensation. Now, the City is only asking abutting property owners to grant a right of entry in order for the work to be done.

5. What is a Right of Entry?

For this project, a right of entry would only allow the City to enter onto a designated portion of private property (generally the mud flat in the creek) for a specific purpose (to remove accumulated silt within a portion of the creek) for a specified period of time (until the project is completed). No permanent property rights would be conveyed with this document and the property owner would not be asked to bear any expense in connection with the preparation, execution or recordation of this document. Further, unlike a permanent easement, a right of entry would not require mortgage companies' involvement/concurrence in order for the property owner to be able to sign the agreement.

6. Can I see the design plans?

Currently, only the conceptual plans are available, and these have been posted on the City of Hampton/Dept. of Public Works website. Production of final design plans is expensive, and requires considerable environmental permitting activities and approvals to occur. At this point, no permit applications have been made (although the City has met with regulators on a preliminary basis). The preliminary plans do not show mitigation requirements (which will not affect property owners), nor construction access points (which will affect a few properties because the contractor will need to have access to the project at feasible locations).

7. How will the proposed storm gate at Kecoughtan Road work?

The proposed storm gate will normally be open to allow daily tidal flushing through the existing culverts under Kecoughtan Road. This flushing is important to preserve constructed wetlands north of Kecoughtan Road. However, in a storm event with higher than normal tides, a float mechanism would be activated when the water level in Indian River Creek rises above elevation 2.0 feet, and the storm gate would close, blocking tidal water from flowing upstream of Kecoughtan Road. Once the tide level dropped below the 2.0 foot elevation, the storm gate would reopen to allow normal tidal flow in both directions. This type of higher tide event would only occur during storm surges, approximately six or so times per year.

8. Will the project increase flood protection from hurricanes, nor'easters, and extreme storms?

North of Kecoughtan Road, the gate would block storm surge up to elevation 6.0 feet (NAVD88 datum), (which is the approximate height of Kecoughtan Road). This would be substantial relief to those lower lying areas north of Kecoughtan Road, and it is the most protection that can be provided within existing topographic constraints. Storm surges higher than 6.0 feet would overtop Kecoughtan Road, and the gate would provide no protection. The project would also improve street drainage south of Kecoughtan Road by unplugging the 27 +/- existing drainage pipes and channels that flow into the creek and which are currently blocked by silt.

9. What about the people who live South of Kecoughtan Road—will the storm gate increase flooding on their properties?

No. Storm surge elevations are determined by the height of water in the Atlantic Ocean and Chesapeake Bay, tides, winds, and atmospheric pressure. None of these casual factors is affected by the existence of a storm gate in an upstream tributary. Water seeks its own level. If it cannot flow into an upstream area, the elevation of the storm surge is unaffected by the presence of a gate. These types of gates are used throughout the world, and their effectiveness is well established.

10. Why couldn't the storm gate be located farther downstream, at Chesapeake Avenue, in order to protect more properties from extreme tidal events?

Locating the storm gate at the Chesapeake Avenue bridge over Indian River Creek would add over a \$1M to the cost of the project because the bridge opening is wide and the storm gate would have to be larger than the one being considered at Kecoughtan Road. Also, in the area around Chesapeake Avenue there is a significant sand movement/deposition which would prevent a storm gate from closing properly in a storm surge, thereby rendering it ineffective against the rising water level. In addition to the higher construction cost of a storm gate at this location, there would be higher operational costs to maintain the larger gate and to keep it free of sand deposits; whereas, at the proposed Kecoughtan Road location for the storm gate, there is no sand deposition problem.

11. What will the project cost and when would construction begin?

Project cost and scheduling depend upon a number of factors that have yet to be determined, including council approvals, funding availability, the terms and conditions of environmental permits that will be required, the length of time that it takes to obtain the required rights of entry and permits, and the time to design and bid and award the construction contract. It is likely that if the project moves forward, construction would not start until 2013 at the very earliest. It is possible that the project cost could exceed two million dollars, depending upon the requirements of the regulatory agencies (VMRC, Corps of Engineers, Dept. of Environmental Quality, Hampton Wetlands Board, etc.) in issuing the permits for the project.

12. Why can't the entire creek be dredged out from bulkhead to bulkhead so more boating can occur, instead of just digging out a narrow channel for restoring the drainage?

In addition to being prohibitively expensive, dredging of the entire creek from bank to bank would not be permitted by the regulatory agencies who would object to the more significant impact such a project would have on the biology of the creek.

13. What happens if the project moves forward and my pier and/or bulkhead are damaged by the city's contractor in the process of removing silt from the creek?

Nearly all of the proposed work will be taking place out in the mud flats, away from the shorelines, so there is little risk of property damage. However, in the event some property damage does occur as a result of the contractor's operations, the contractor will be held responsible, through insurance that the city will require as part of the contracting process. The right of entry agreement also contains language concerning the protection of private properties along the creek.

14. Why isn't the City offering to pay me for agreeing to a right of entry?

If this project is authorized by City council, the City could be spending at least \$1M to improve the drainage in the creek and in the surrounding neighborhoods. Thus, this project is considered to be mutually beneficial for the City as well as for the area property owners, and no additional compensation to property owners is felt to be justified.

15. What happens if not all of the property owners agree to grant the right of entry?

The city has two options available to be able to implement all, or a portion of this project. If one or more of the property owners along one of the **side channels A, B or C**, do not wish to grant a right of entry, then the city can either drop that channel from the project, and reduce the scope of work to only work on the remaining channels, or the city council could consider asserting the right of eminent domain to obtain the right of entry from the uncooperative owner(s). This latter option may depend upon the percentage of property owners who were willing to convey rights of entry versus the percentage of unwilling, although no decision has been made on what percentage would trigger city council's consideration of this issue. **Also, there has been no discussion with city council as to whether or not they would be willing to assert the right of eminent domain for this project.**

For the main channel from Chesapeake Avenue to Kecoughtan Road, which is the essential element of the project, if one or more property owners along that channel do not wish to grant a right of entry, then the city can either drop the entire project, or the city council could assert the right of eminent domain against those property owners who are not willing to convey the right of entry to the city.

16. What does the City need from property owners to move forward with the project?

The city is asking property owners to indicate their support (or non-support) for the project, by signing and returning the right of entry document to the Department of Public Works. Note that the document signatures must be notarized. (a notary is available at city hall at no cost).

Provided there is support for the project from the property owners, then these documents will be recorded, and project will be designed, and environmental permits will be sought from the regulatory agencies for the work. **The city's permit application to the agencies may require the signature of owners of abutting properties at that time, since the work would be on private properties.** Assuming the regulatory agencies will issue permits for the work, then once these permits are obtained, the project can be advertised for bids, and the construction contract award would follow.

In the event that there is insufficient interest in the project, as indicated by a failure of property owners to sign and return the right of entry documents, then the City would not proceed with the project, and further discussions about the project would be terminated. This outcome would put all of the properties in the Indian River Creek area at greater risk of flooding from major rainfall events and higher than normal tides.